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FINANCIAL DERIVATIVES A FUTURE OF INDIAN FINANCIAL MARKET

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Abstract
Among all the innovations that have flooded the international financial markets, financial derivatives occupy the driver's seat. These specialized instruments facilitate the shuffling and redistribution of the risks that an investor faces. Thus aids in the process of diversifying ones portfolio. The volatility in the equity markets over the past years has resulted in greater use of equity derivatives. The volume of the exchange traded equity futures and options in most of the mature markets have seen a significant growth. It goes beyond that the local derivative in the emerging markets has witnessed widespread use of the derivative instrument for a variety of reasons. This continuous growth and development by the emerging market participants has resulted in capital inflows as well as helped the investors in risk protection through hedging.

Introduction and concept of derivatives
Derivatives are financial contracts whose values are derived from the value of an underlying primary financial instrument, commodity or index, such as: interest rates, exchange rates, commodities, and equities. The International Monetary Fund defines derivatives as "financial instruments that are linked to a specific financial instrument or indicator or commodity and through which specific financial risks can be traded in financial markets in their own right. The value of financial derivatives derives from the price of an underlying item, such as asset or index. Unlike debt securities, no principal is advanced to be repaid and no investment income accrues" While some derivatives instruments may have very complex structures, all of them can be divided into basic building blocks of options, forward contracts or some combination thereof. Derivatives allow financial institutions and other participants to identify, isolate and manage separately the market risks in financial instruments and commodities for the purpose of hedging, speculating, arbitraging the price differences of the investments and adjusting portfolio risk. The emergence of the market for derivatives products, most notable forwards, futures, options and swaps can be traced back to the willingness of risk-averse economic agents to guard themselves against uncertainties arising out of fluctuations in asset prices. The financial markets can be subject to a very high degree of volatility. Through the use of derivative products, it is possible to partially or fully transfer price risks by locking-in asset prices. As instruments of risk management, derivatives products generally do not influence the fluctuations in the underlying asset prices. However, by locking-in asset prices, derivatives products minimize the impact of fluctuations in asset prices on the profitability and cash flow situation of risk-averse investors.

Types of derivatives:
Derivatives can be classified in different ways. Some of these are:
Commodity derivatives and financial derivatives

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Derivatives contracts can be entered into for different type of commodities such as sugar, jute, pepper, potato etc. On the other hand, the derivative in currencies, gilt edged securities, shares, share indices etc are known as financial derivatives.

Basic and complex derivatives

The basic derivatives are derivatives on underlying assets. Future and Options are two basic derivatives. However there are certain other derivatives such as swaps which may be classifies as complex derivatives.

Kinds of Financial Derivatives:

Forwards

A forward contract refers to an agreement between two parties, to exchange an agreed quantity of an asset for cash at a certain date in future at a predetermined price specified in that agreement. The promised asset may be currency, commodity, instrument etc, In a forward contract, a user (holder) who promises to buy the specified asset at an agreed price at a future date is said to be in the 'long position'. On the other hand, the user who promises to sell at an agreed price at a future date is said to be in 'short position'.

Futures

A futures contract represents a contractual agreement to purchase or sell a specified asset in the future for a specified price that is determined today. The underlying asset could be foreign currency, a stock index, a treasury bill or any commodity. The specified price is known as the future price. Each contract also specifies the delivery month, which may be nearby or more deferred in time. The undertaker in a future market can have two positions in the contract: - a) Long position is when the buyer of a futures contract agrees to purchase the underlying asset. b) Short position is when the seller agrees to sell the asset. Futures contract represents an institutionalized, standardized form of forward contracts. They are traded on an organized exchange, which is a physical place of trading floor where listed contract are traded face to face. A futures trade will result in a futures contract between 2 sides- someone going long at a negotiated price and someone going short at that same price. Thus, if there were no transaction costs, futures trading would represent a 'Zero sum game' what one side wins, which exactly match what the other side loses. 9 Types of futures contracts a) Agricultural futures contracts: These contracts are traded in grains, oil, livestock, forest products, textiles and foodstuff. Several different contracts and months for delivery are available for different grades or types of commodities in question. The contract months depend on the seasonality and trading activity. b) Metallurgical futures contract:- This category includes genuine metal and petroleum contracts. Among the metals, contracts are traded in gold, ¬ silver, ¬platinum and¬Copper. Of the petroleum products, only heating oil, crude oil and gasoline is¬traded. c) Interest rate futures contract These contracts are traded on treasury bills, notes, bonds, and banks certification of deposit, as well as Eurodollar. d) Foreign exchange futures contract These contracts are trade in the British Pound, the Canadian Dollar, the Japanese Yen, the Swiss Franc and the Deutsche Mark. Contracts are also listed on French Francs, Dutch Guilders and the Mexican Peso, but these have met with only limited success.

Option

An option contract is a contract where it confers the buyer, the right to either buy or to sell an underlying asset (stock, bond, currency, and commodity) etc. at a predetermined price, on or before a specified date in the future. The price so predetermined is called the 'Strike price' or 'Exercise price'. Depending on the contract terms, an option may be exercisable on any date during a specified period or it may be exercisable only on the final or expiration date of the period covered by the option contract. 10 Option Premium In return for the guaranteeing the exercise of an option at its strike price, the option seller or writer charges a premium, which the buyer usually pays upfront. Under favorable circumstances the buyer may choose to exercise it. Alternatively, the buyer may be allowed to sell it. If the option expires without being exercised, the buyer receives no compensation for the premium paid. Writer In an option contract, the seller is usually referred to as "writer", since he is said to write the Contract. If an option can be excised on any date

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during its lifetime it is called an American Option. However, if it can be exercised only on its expiration date, it is called an European Option. Option instruments a) Call Option A Call Option is one, which gives the option holder the right to "buy" an underlying asset at a pre-determined price. b) Put Option A put option is one, which gives the option holder the right to "sell" an underlying asset at a pre-determined price on or before the specified date in the future. c) Double Option A Double Option is one, which gives the Option holder both the right to "buy" and "sell" Underlying asset at a pre-determined price on or before a specified date in the future.

Swap

A SWAP transaction is one where two or more parties exchange (swap) one pre- determined Payment for another. There are three main types of swaps:- a) Interest Rate swap An Interest Rate swap is an agreement between 2 parties to exchange interest obligations or Receipts in the same currency on an agreed amount of notional principal for an agreed period of time. 11 b) Currency swap A currency swap is an agreement between two parties to exchange payments or receipts in One currency for payment or receipts of another. c) Commodity swap A commodity swap is an arrangement by which one party (a commodity user/buyer) agrees to Pay a fixed price for a designated quantity of a commodity to the counter party (commodity producer/seller), who in turn pays the first party a price based on the prevailing market price (or an accepted index thereof) for the same quantity.

Participants in derivative markets:

Hedgers:

For protecting against adverse movement. Hedging is a mechanism to reduce price risk inherent in open positions. Derivatives are widely used for hedging. A Hedge can help lock in existing profits. Its purpose is to reduce the volatility of a portfolio, by reducing the risk.

Speculators:

To make quick fortune by anticipating/forecasting future market movements. Hedgers wish to eliminate or reduce the price risk to which they are already exposed. Speculators, on the other hand are those class of investors who willingly take price risks to profit from price changes in the underlying. While the need to provide hedging avenues by means of derivative instruments is laudable, it calls for the existence of speculative traders to play the role of counter-party to the hedgers. It is for this reason that the role of speculators gains prominence in a derivatives market.

Arbitrageurs:

To earn risk-free profits by exploiting market imperfections. Arbitrageurs profit from price differential existing in two markets by simultaneously operating in the two different markets.

Derivatives market in India

Derivatives trading commenced in India in June 2000 after SEBI granted the approval to this effect in May 2000. SEBI permitted the derivative trading on two stock exchanges, i.e. and BSE, and NSE, their clearing house/corporation to commence trading and settlement in approved derivative contracts. Begin with SEBI's approved trading in index futures contracts based on S&P CNX Nifty Index and BSE-30 (Sensex) Index. This was followed by approval for trading in options based on these two indices and options on individual securities. The trading in index options commenced in June 2001 and trading in options on individual securities would commence in July 2000. While trading in futures of individual stocks started from November 2001.

In June 2003, SEBI and/RBI approved the trading on interest rate derivative instruments only in NSE. Introduced trading of interest rate futures contracts on June 24, 2003 on 91-day Notional T-Bills and 10-year Notional 6% coupon bearing as well as zero coupon Bonds. Futures and Options were also introduced on CNX IT Index in August 2003. The total exchange traded derivatives witnessed a

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value of Rs.5, 423, 333 million during 2002-03 as against Rs. 1,038,480 million during the preceding year. While NSE accounted for about 99.5% of total turnover, BSE accounted for less than 1% in2002-03.

The market witnessed higher trading levels from June 2001 with introduction of index options, and still higher volumes with the introduction of stock options in July 2001. In the year 2002 has been a remarkable year for the global derivatives market. This year witnessed NSE making huge strides and also moved upward in the global ranking. According to the Futures Industry Associations in the year 2002, NSE ranked 30th in the global futures and options volume, whereas it ranks 2nd in the world, in terms of stock futures.

MAJOR PRODUCTS OF DERIVATIVES AVAILABLE IN INDIA

- **S & P CNX NIFTY FUTURES.**
- **S & P CNX NIFTY OPTIONS.**
- **CNX IT FUTURES.**
- **CNX IT OPTIONS.**
- **BANK NIFTY FUTURES.**
- **BANK NIFTY OPTIONS.**
- **FUTURES ON INDIVIDUAL SECURITIES.**
- **OPTIONS ON INDIVIDUAL SECURITIES.**
- **INTEREST RATES DERIVATIVES.**

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Functions performed by derivatives

- Derivatives perform several useful economic functions such as:
- Derivatives allow risk to be managed by hedging or risk transfer.
- Derivatives reduce transaction costs because it is easier to buy and sell in the forward market than in the cash market.
- Lower transaction costs often lead to higher liquidity in the derivative market.
- Lower transaction costs and increasing liquidity, derivative market improves price discovery and lead to more accurate price in the cash market. This leads to better economic decisions.
- Derivatives increase the attractiveness of the underlying asset by increasing its liquidity an dby allowing its risks to be hedged. This brings new classes of investors into the fold of asset and broaden its appeal.
- In many markets, it has been found that the existence of derivatives markets leads to lower volatility. This is due to better price discovery as well as a broader investor base.

Factors globally responsible for growth of financial derivatives

- The factors which have been identified as a major driving force behind growth of financial derivatives are as follows:
- Increased volatility in asset prices in financial markets.
- Increased integration of national financial markets with international markets.
- The marked improvements in communication facilities and sharp decline in their costs.
- The development of more sophisticated risk management strategies.
- Innovations in Derivatives market, leading to higher returns and reducing risk as compared to individual financial assets.
- Active use of derivative instruments allows overall business risk profile to be modified, thereby providing the potential to improve earnings quality by offsetting undesired risks.

Ten common myths about derivatives

Some of the common misconceptions about Financial Derivatives are as follows:

- Derivatives are new, complex, High Tech Financial Instruments created by stock Market Rocket scientists.
- Derivatives are purely speculative, highly leveraged instruments.
- The Enormous size of the Financial derivatives Market Dwarfs Bank capital , Thereby making derivatives Trading an Unsafe and Unsound Banking Practice.
- Only Large MNC's and Large Banks have a purpose for using derivatives.
- Financial derivatives are simply the latest Risk Management fad.
- Only Risk seeking organizations should use Derivatives.
- Derivatives link market participants more tightly together, thereby increasing systematic Risk.
- Because of Risk associated with derivatives, banking Regulators should Ban their use.

Conclusion

Financial Derivatives have changed the face of finance by creating new ways to understand, measure, and manage financial risks. Ultimately, derivatives offer organizations the opportunity to break financial risks into smaller components and then to buy and sell those components to meet specific risk management objectives. Moreover, under a market oriented philosophy, derivatives allow for

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the free trading of individual risk components, thereby improving market efficiency. Using financial derivatives should be considered a part of any business risk management strategy to ensure that value enhancing investment opportunities can be pursued.

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